What height for your separate electric oven ?

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Are you planning to install a separate electric oven—the type that is independent of the surface-cooking units? The main advantage of a separate oven is that you can have it installed at a height that means maximum comfort, safety, and convenience for *you*.

How can you decide on an oven height that will be comfortable for you to use? What measurements can you make to be sure the oven is installed at this height?

Research was undertaken to learn what determines a convenient height for the individual homemaker. Only electric ovens were studied. Results of the research were used to develop a guide for installing separate electric ovens.

Over 50 women cooperated in the study. Each found an oven height that was satisfactory for her. The shortest woman's height was 4 feet 10½ inches, the tallest 6 feet 1 inch. Their body builds varied from slender to sturdy. Their elbow heights varied from 35 to 46½ inches. "Elbow height" is the distance from the floor to the elbow. It was measured when the woman was standing with her arm bent so that the upper arm and forearm made a right angle. (See figure 3.)

The height for comfortable use of the oven depended more on each homemaker's *elbow height* than on her standing height or her body build. In every case, the level of the opened oven door was between 1 and 7 inches below the homemaker's elbow height. A 3-inch level was most popular. With the levels they preferred, the top surface of the opened oven door ranged from 30 to 41 inches above the floor, with a majority between 34 and 39 inches.

In brief:

Place your separate electric oven so that the top side of the fully opened oven door is between 1 and 7 inches below your elbow height.

The effects of the various oven-door levels on the body positions of two homemakers as they lifted food, inspected it, and turned it over in the oven can be seen on pages 2 and 3. The photograph on page 4 shows how to measure your elbow height and use the guide.

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Major considerations: co

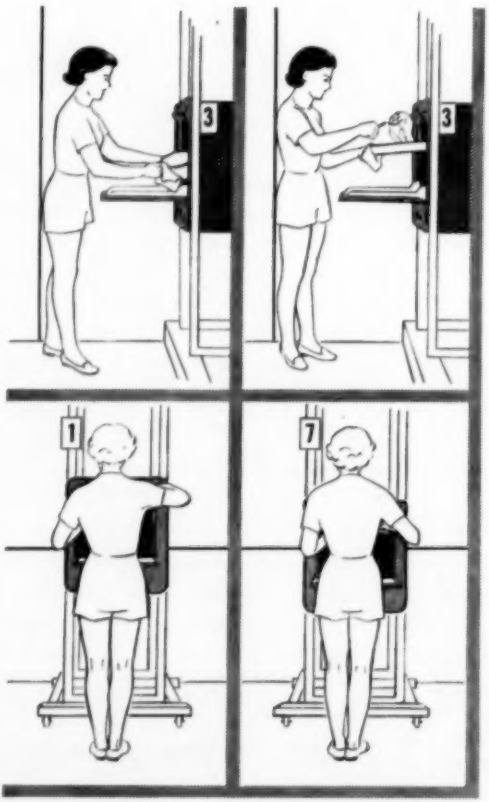
The convenience of a separate oven depends upon how easily you can lift food in and out of the oven, turn over broiling food, and inspect it. The number of times you use your broiler and the relative importance to you of easy lifting versus easy seeing will help you decide how many inches to allow between your elbow height and the top of the opened oven door.

Your most comfortable work area is just below your elbow height. It is tiring to hold your hands above your elbow height as you work. If the opened oven door is lower than your elbow, you will probably find that you can use your arm and shoulder muscles to advantage to lift things in and out of the oven. Most people can handle heavy loads such as a ham, a turkey, or a large roast with less strain if they can place them in the oven at, or slightly below, their elbow height or "carrying level." It is also more comfortable to manage the broiler and the food on it when you can work with your arms close to "carrying level."

When the oven is placed low enough for comfort in lifting and turning

FIGURE 1

Two homemakers use a separate electric oven in the research laboratory.



Mrs. A has the top of the opened oven door at a practical level for her—3 inches below her elbow height.

Mrs. B has the top of the opened oven door first at 1 inch and then at 7 inches below her elbow height. Notice how much higher she has to lift her arm to turn over broiling meat at the 1-inch level than she does at the 7-inch level.

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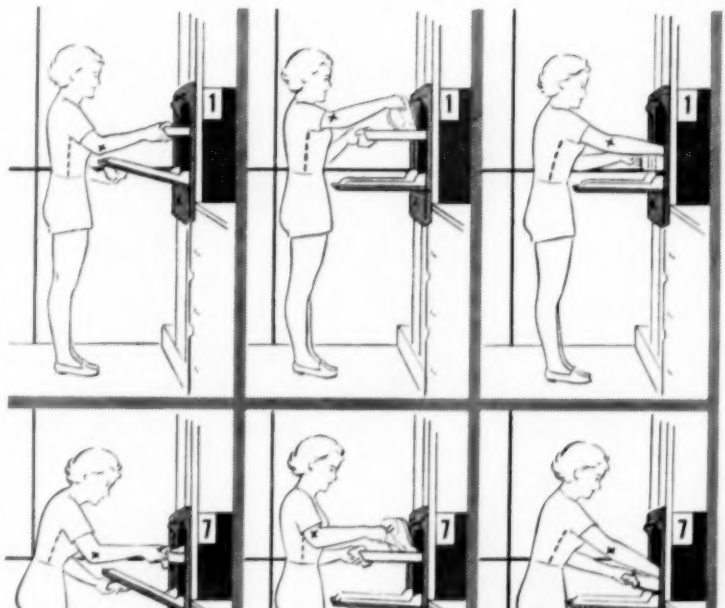
food over, you may not be able to stand erect directly in front of the oven and see all of its contents. There are two simple ways to avoid bending: either pull out the oven rack with the food on it, or just step back. In general, it is better to place your oven so that you do not have to lift too high, but this means that you must adjust your body position for inspecting.

Allow space in front of the opened oven to stand and work. Elbow room is also needed on both sides of the oven. Notice the space the homemakers use, figures 1 and 2.

Safety is important, too. When the top of the opened oven door is *below* your elbow, rather than above, there is less risk of burning your forearm on the edge of the door as you reach in or out of the oven.

A heat-resistant counter beside your oven makes it easier to use. You can put down hot food as soon as you take it out of the oven, and close the oven door immediately. When you put heavy things like a roast into the oven, you have a place to rest them briefly when you open the oven door.



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Take your measurements

After you decide on the oven level that will suit you best, make these measurements to learn how high to build the support or framework to hold the separate oven.

1. Determine your elbow height. Wear the type of shoes you ordinarily wear to work in the kitchen. Stand comfortably erect and bend your arms as shown in figure 3. Then have someone measure the distance between the floor and your elbow.

2. Determine the distance from the top side of the opened oven door down to the bottom outside of the oven where it will be supported (figure 3). Do not include any trim that extends below the frame. You will need to measure your own electric oven since ovens vary in construction and dimensions.

3. Now add the measurement obtained for step 2 above and the distance you want between your elbow and the top of the opened oven door. Subtract this total from your elbow height. Your answer gives you the height from the floor to build a support for your separate oven. Many of you may find this height to be between 27 and 32 inches from the floor.

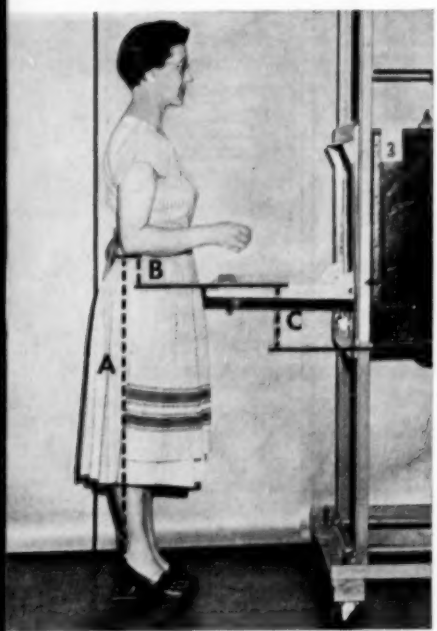

FIGURE 3

Measurements you need to know

A. Your elbow height.

B. Preferred distance between your elbow and the top of the opened oven door.

C. Distance from the top surface of the opened oven door and the bottom outside of the oven.

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